

## **FERNALD'S STRATEGIC INITIATIVES**

This section presents the eight strategic initiatives that define the 2006 closure strategy for Fernald. The initiatives encompass the seven top-level Fernald remediation subprojects, coupled with a group of sitewide initiatives for Fernald as a whole. For each initiative, a description of the scope, execution strategy, current status, and key actions/responsibilities to achieve 2006 closure is provided.

The initiatives are presented in the order of the risk they pose to human health and the environment. The Silos 1&2 and Silo 3 subprojects present the greatest risk and are Fernald's highest priority efforts. The Silos 1&2 subproject also defines the critical-path schedule constraint for a 2006 closure, and therefore receives top-priority site funding allocations each year.

The Aquifer Restoration subproject, while a top priority environmental concern that has driven earlier funding allocations to install needed infrastructure, requires continuation of restoration activities until deemed complete by DOE and the site's regulatory agencies. Completion of this subproject therefore falls outside the definition of site closure.

All other subprojects will reach closure in 2006, consistent with Fernald's site-closure definition presented in the Introduction.

Figure 3 lists the acceleration strategies and corresponding cost and schedule benefits that were incorporated into the 2006 closure baseline for each of the seven subprojects. The implementation of these strategies will accelerate site closure from December 2009 to December 2006.

This section begins with an overview of Fernald's 2006 execution plan and funding profile, and ends with a discussion of the 2006 optimization opportunities that can be used to put additional funds to work at Fernald above the 2006 funding profile, should they be made available as a result of increased efficiency or additional appropriations.

Project Acceleration to Attain Site Closure by 2006		
Subproject	Items Accelerated	Benefits
Silos 1&2	<ul> <li>Accelerate completion of Silos 1&amp;2 design</li> <li>Accelerate construction of the Accelerated Waste Retrieval Facility</li> <li>Accelerate transfer of 8,890 cubic yards of Silos 1&amp;2 material into the Accelerated Waste Retrieval Facility</li> <li>Accelerate off-site disposition of Silos 1&amp;2 material</li> </ul>	<ul> <li>Transfer of silo material into safe storage significantly reduces radon emissions and risk to the public</li> <li>Accelerated off-site disposition of silo material eliminates source term and allows site closure by 2006</li> </ul>
Silo 3	Accelerate off-site disposition of the Silo 3 materials	<ul> <li>Acceleration strategy reduces remediation costs by eliminating treatment and utilizing bulk rail transport off site</li> </ul>
Waste Pits	Increase production quantities to 150,000 tons per year	• Accelerates project schedule and ensures rail cars are available for Silos 1&2 material
Low-Level Waste and Mixed Waste Disposition	Accelerate dispositioning of low-level waste and mixed waste containers from Plant 1 Pad	Allows for the accelerated start of the Plant 1 Phase II Complex D&D
Soil Excavation and On-Site Disposal Facility	<ul> <li>Accelerate construction of Cell 4&amp;5 liners</li> <li>Accelerate soil excavation, on-site waste placement, and cell closure</li> </ul>	<ul> <li>Acceleration of excavation and placement results in early source term removal</li> </ul>
Facility D&D	Accelerate the following:  • Multi-Complex D&D  • Plant 1 Phase II D&D  • Pilot Plant and Administration Complex D&D  • Laboratory D&D	Accelerated removal of the structures allows soil excavation access beneath Areas 3B and 4B (western Production Area) and resultant early placement of D&D debris and excavated soil in the On-Site Disposal Facility
Aquifer Restoration	No acceleration opportunities required	Not applicable

**Figure 3**: Fernald's 2006 execution plan accelerates key Fernald subprojects to attain site closure three years earlier.



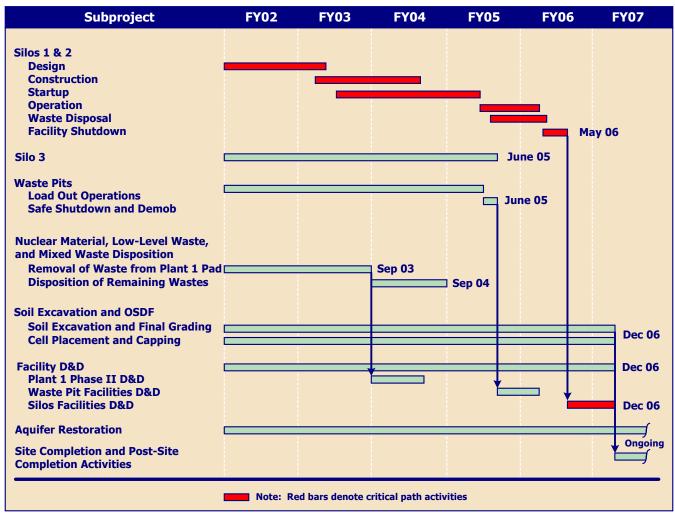
## **Summary of the 2006 Execution Plan**

Consistent with Fernald's closure contract, which established an annual \$290 million flat-funding profile and a target completion date of 2010, Fluor Fernald submitted a site closure baseline to DOE in September 2001. This baseline established a completion date of December 2009, resulting in a one-year schedule acceleration over contract requirements.

In response to the original baseline submittal, Assistant Secretary Jessie Roberson challenged the Fernald team to determine an approach to accelerate site closure to December 2006 and to develop a detailed execution plan to achieve this goal. Fernald's independently validated current baseline now incorporates the 2006 closure objective and the aggressive results-oriented activities needed to reach this accelerated closure date.

The acceleration of these key activities completes the subprojects ahead of the previously baselined schedule, reduces overhead and landlord costs, reduces life-cycle project costs, and reduces risks to human health and the environment by earlier elimination of source term.

The Fernald Team has developed a detailed execution plan (baseline) to achieve closure by 2006. Figure 4 shows the closure schedule for the 2006 execution plan. The Fernald project critical path – depicted in red – runs through the design, construction, and operations of the Silos 1&2 treatment facility, and the off-site disposition of Silos 1&2 waste. Following waste disposition, the Silos 1&2 treatment facility will be safely shut-down and dismantled and the debris disposed of, thereby completing the critical path and finalizing Fernald closure in 2006.



**Figure 4:** Fernald's 2006 baseline cuts 3 years off the closure schedule.

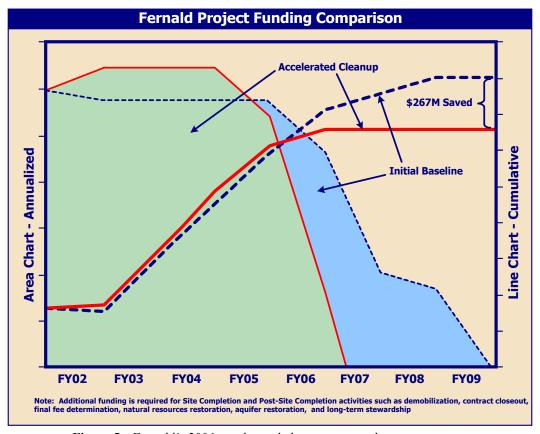


Figure 5 illustrates the funding comparison between the initial 2009 baseline and the accelerated 2006 approach. The annualized funding for both cases, which is shown by the green and blue area curves, demonstrates that closure can be reached three years earlier with a relatively small increase in funding in FY03, FY04, and FY05. The cumulative funding for both cases, which is shown by the red and blue line graphs, demonstrates that Fernald's 2006 accelerated cleanup approach saves taxpayers \$267 million in lifecycle costs.

Following site closure in December 2006, limited follow-on activities will be performed, defined as Site Completion in the Fernald closure contract. These activities include contract closeout, demobilization, aquifer restoration, and some limited natural resource restoration.

In addition, Post-Site Completion (which is outside of the Fernald closure contract) includes long-term stewardship and continued operations of the Advanced Wastewater Treatment Facility to treat contaminated groundwater until risk-based remedial goals are met. The rail infrastructure will also remain to support eventual D&D of the Advanced Wastewater Treatment Facility.

With the acceleration of Fernald site closure from December 2009 to December 2006, the execution schedule for several subprojects (e.g., Waste Pits subproject and the Low-Level Waste and Mixed Waste Disposition subproject) has very little float, resulting in those subprojects being close to critical path themselves. Therefore, these subprojects are treated as having secondary critical path schedules and managed accordingly.



**Figure 5:** Fernald's 2006 accelerated cleanup approach saves taxpayers \$267 million in life-cycle costs.